Abstract

In the current era of globalization, the media or the Internet via a mobile device is often used as a communication gadget, such as social media, media forums, and photo sharing. Need a good connection to upload and the camera to photo sharing social media on the internet. Sometimes the process is slow. This is because the image files with large size will take a long time when it is transmitted. Therefore there needs to be a way to overcome this problem is image compression. SPIHT algorithm is used in image compression, but still it is less rapid in the process. In this thesis used preprocessing by combining the results of two subband Wavelet transform algorithms for input Set Partitioning In Hierarchical Trees (SPIHT) on the basis of Wavelet Transformation. First analyzed the influence of the subband-subband compression results. The results are then analyzed and obtained compression compression ratio and PSNR. Compression ratio and PSNR results of the system is then compared with the compression ratio and PSNR results of SPIHT algorithm as a parameter. By using this algorithm produced a better compression ratio than SPIHT an average 96.72% and the PSNR lower than SPIHT is about 30 db.

Key Word: image compression, *preprocessing, subband*, wavelet, SPIHT